

FIG. 1

MAGNETIC DISC/MAGNETIC HEAD TESTING APPARATUS

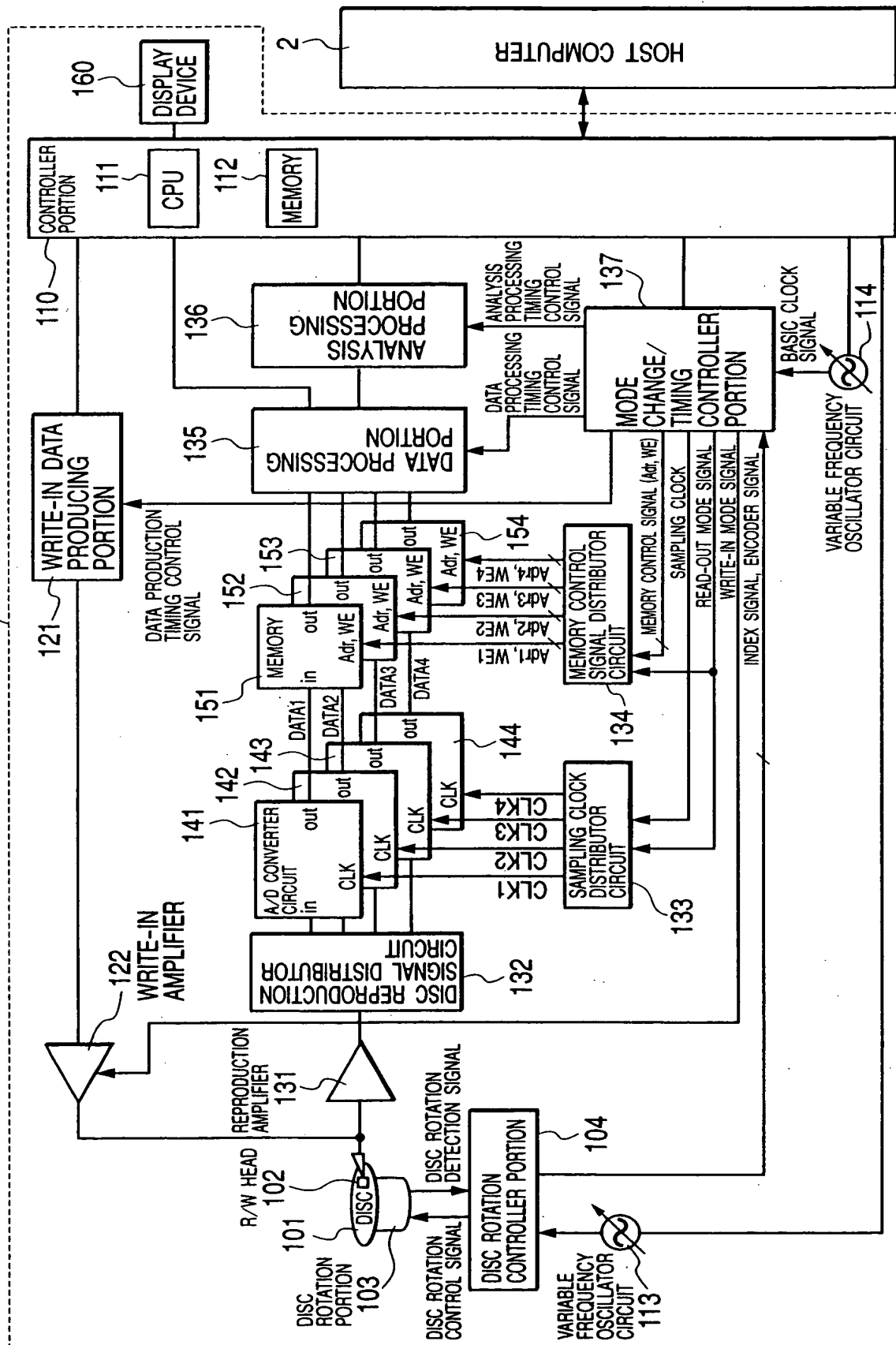
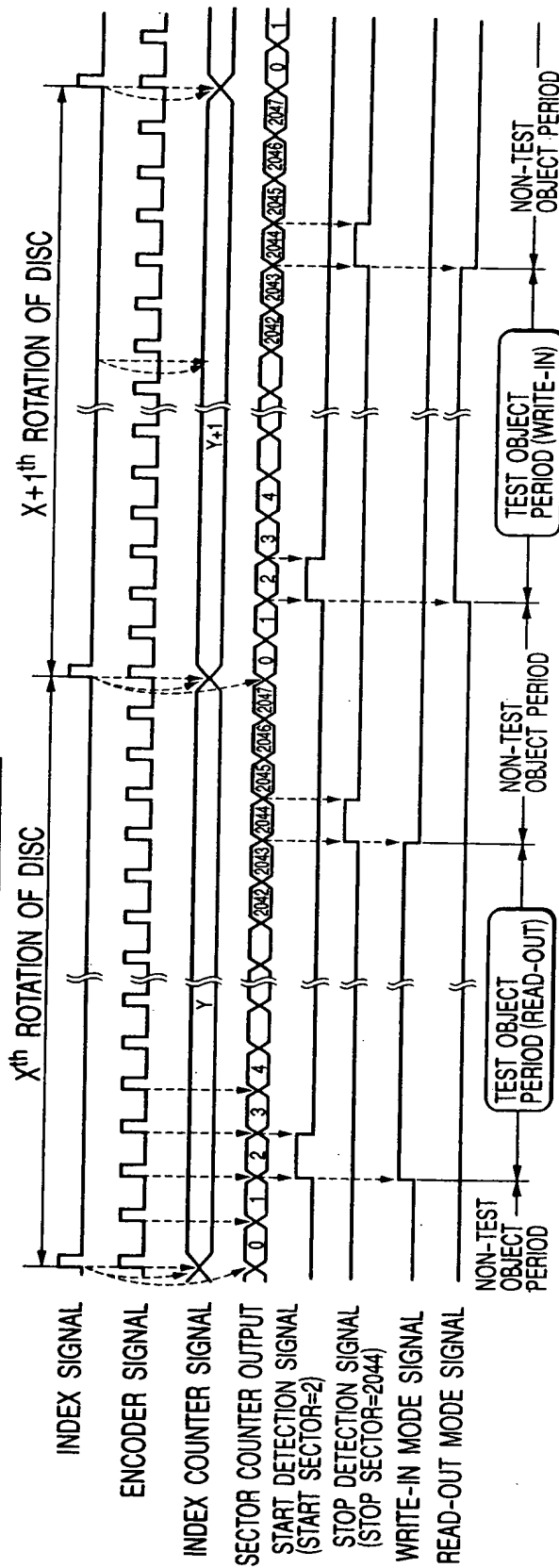


FIG. 2

(1) EXAMPLE OF CONDUCTING TEST ON ARBITRARY SECTOR
WITH USING INDEX SIGNAL AND ENCODER SIGNAL



(2) EXAMPLE OF CONDUCTING DISC TEST WITH USING INDEX SIGNAL

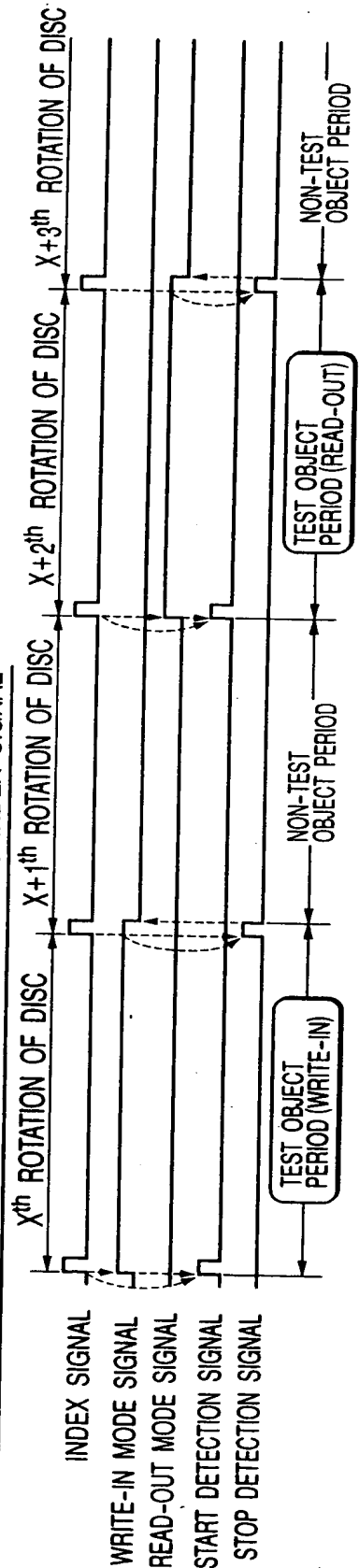
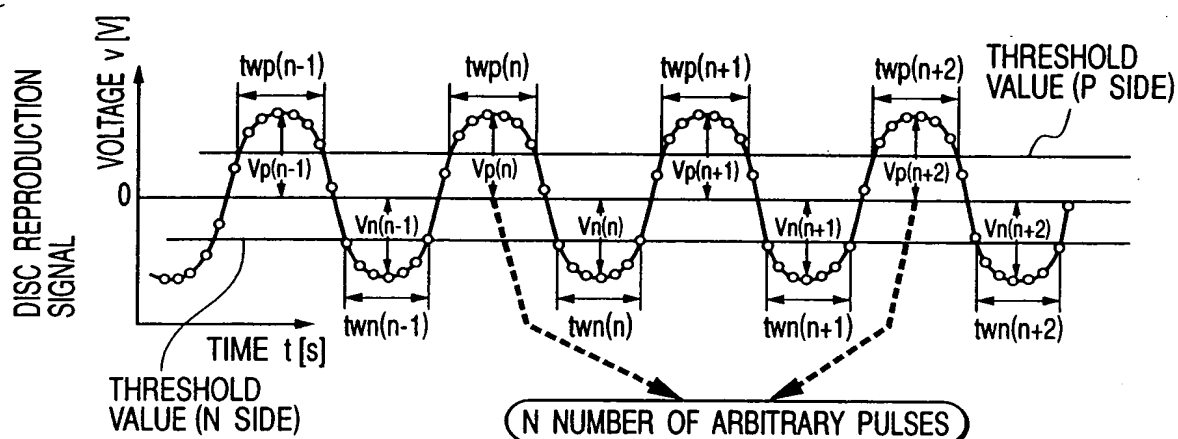


FIG. 3



AMPLITUDE: ..., $V_p(n-1)$, $V_p(n)$, $V_p(n+1)$, $V_p(n+2)$, ... [P SIDE]

..., $V_n(n-1)$, $V_n(n)$, $V_n(n+1)$, $V_n(n+2)$, ... [N SIDE]

PULSE WIDTH: ..., $t_{wp}(n-1)$, $t_{wp}(n)$, $t_{wp}(n+1)$, $t_{wp}(n+2)$, ... [P SIDE]

..., $t_{wn}(n-1)$, $t_{wn}(n)$, $t_{wn}(n+1)$, $t_{wn}(n+2)$, ... [N SIDE]

STATISTIC CALCULATION PROCESS OF AMPLITUDE VALUE V_p ON CONTINUOUS DISC REPRODUCTION SIGNAL PULSES FROM a^{th} TO b^{th}

$$\text{AVERAGE VALUE: } \bar{V}_p = \frac{1}{(b-a+1)} \sum_{k=a}^b V_p(k)$$

$$\text{DISPERSION VALUE: } S_{Vp}^2 = \frac{1}{(b-a+1)} \sum_{k=a}^b \{V_p(k) - \bar{V}_p\}^2$$

$$\text{STANDARD DEVIATION VALUE: } S_{Vp} = \sqrt{S_{Vp}^2}$$

FIG. 4

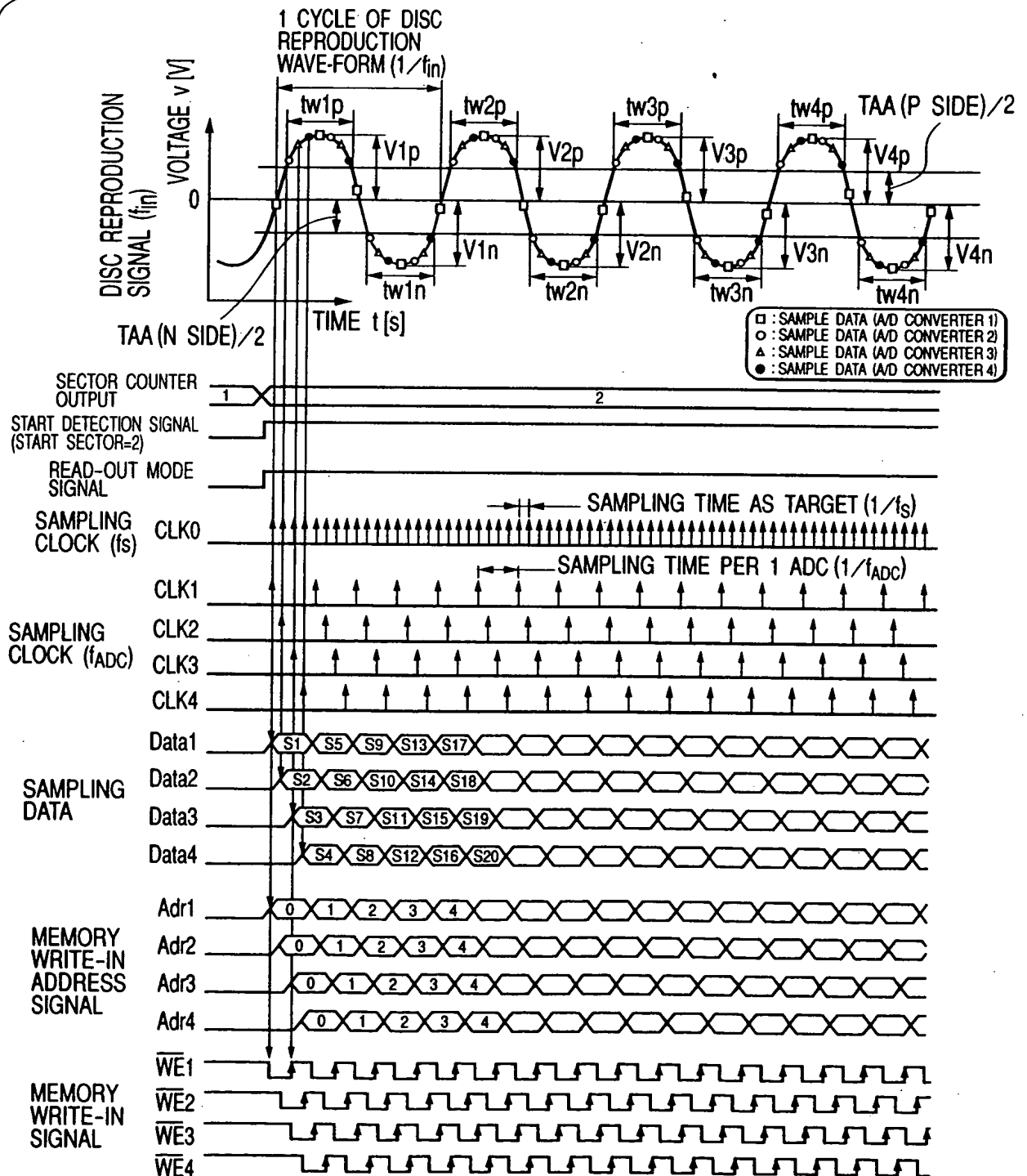
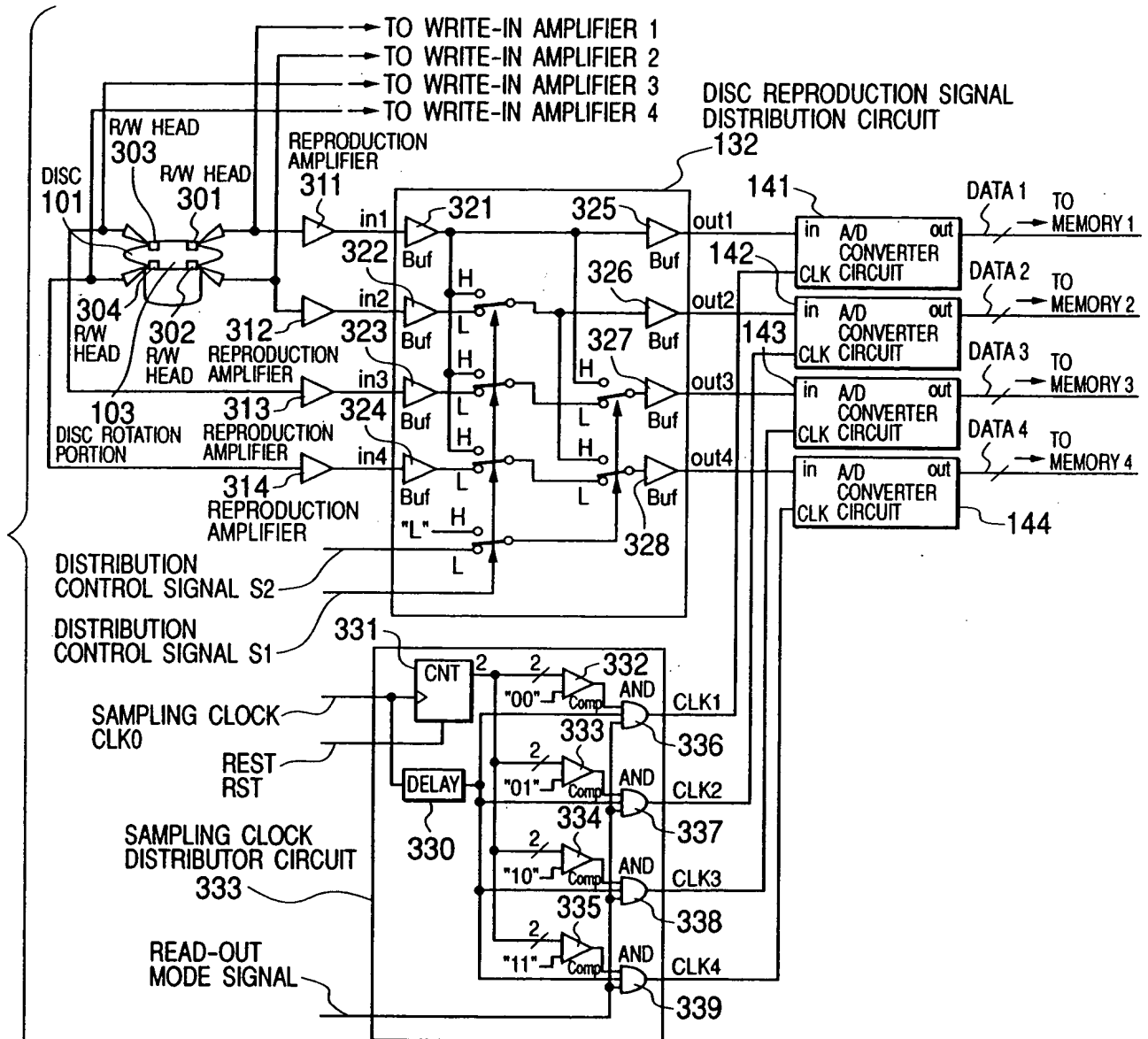


FIG. 5



INPUT/OUTPUT CONTROL IN DISC REPRODUCTION SIGNAL DISTRIBUTOR CIRCUIT

DISTRIBUTION CONTROL SIGNAL		DISTRIBUTION CONTROL OUTPUT				INPUT/OUTPUT DISTRIBUTION RATE
S1	S2	out1	out2	out3	out4	
H	H	in1	in1	in1	in1	1:4
	L	in1	in1	in1	in1	1:4
L	H	in1	in2	in1	in2	2:4
	L	in1	in2	in3	in4	4:4

FIG. 6

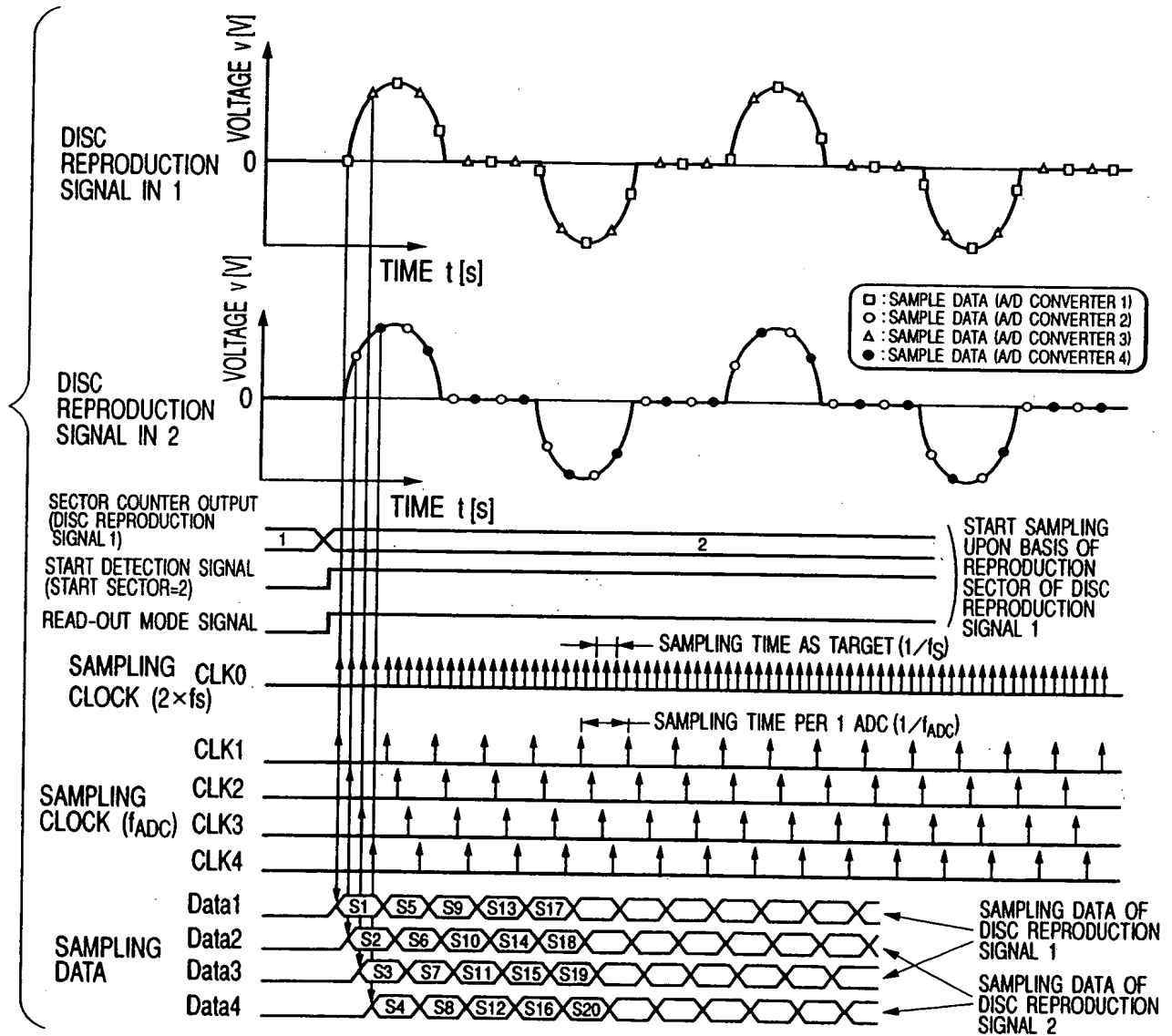
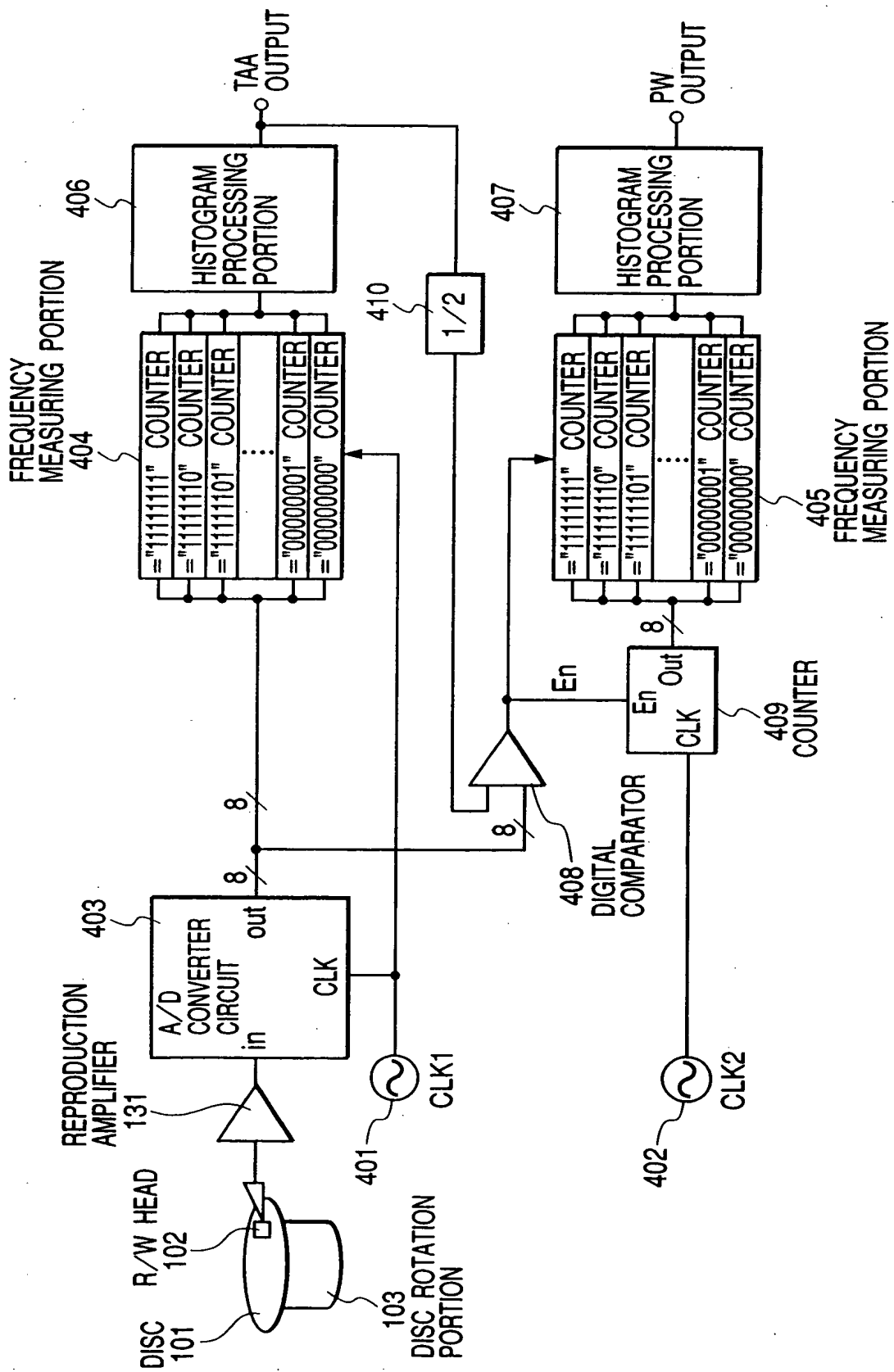


FIG. 7



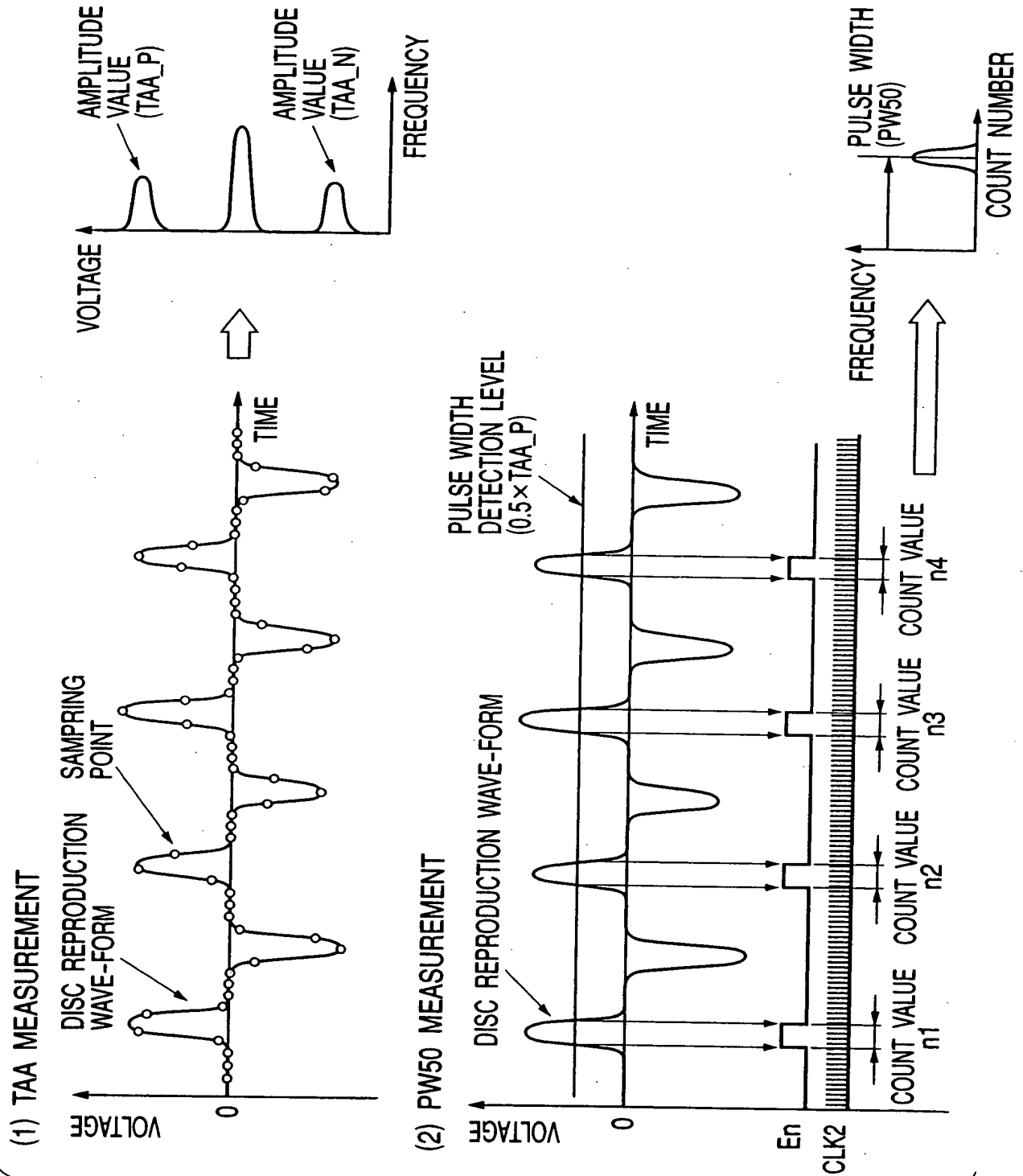


FIG. 8

FIG. 10

PRIOR ART

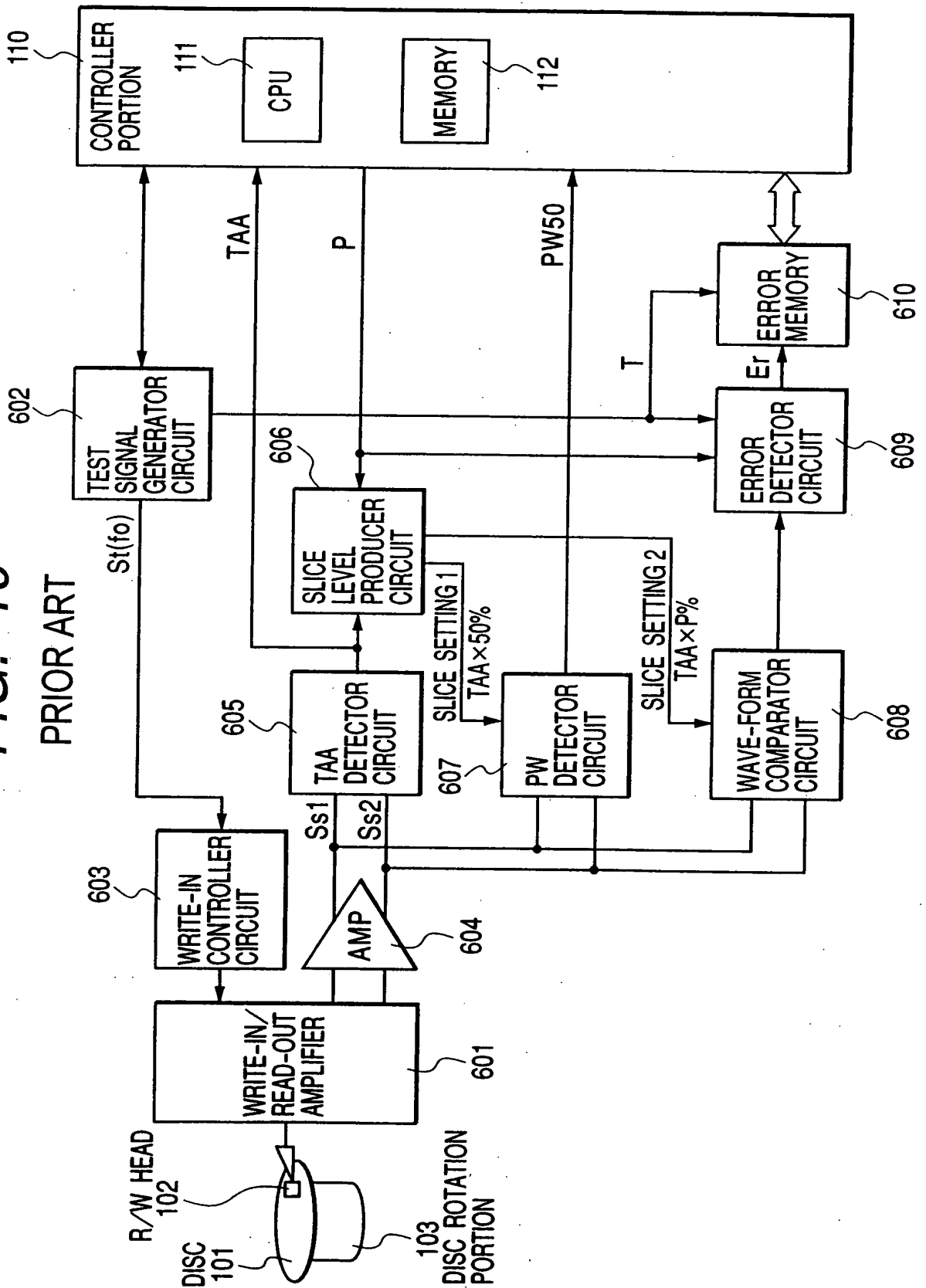
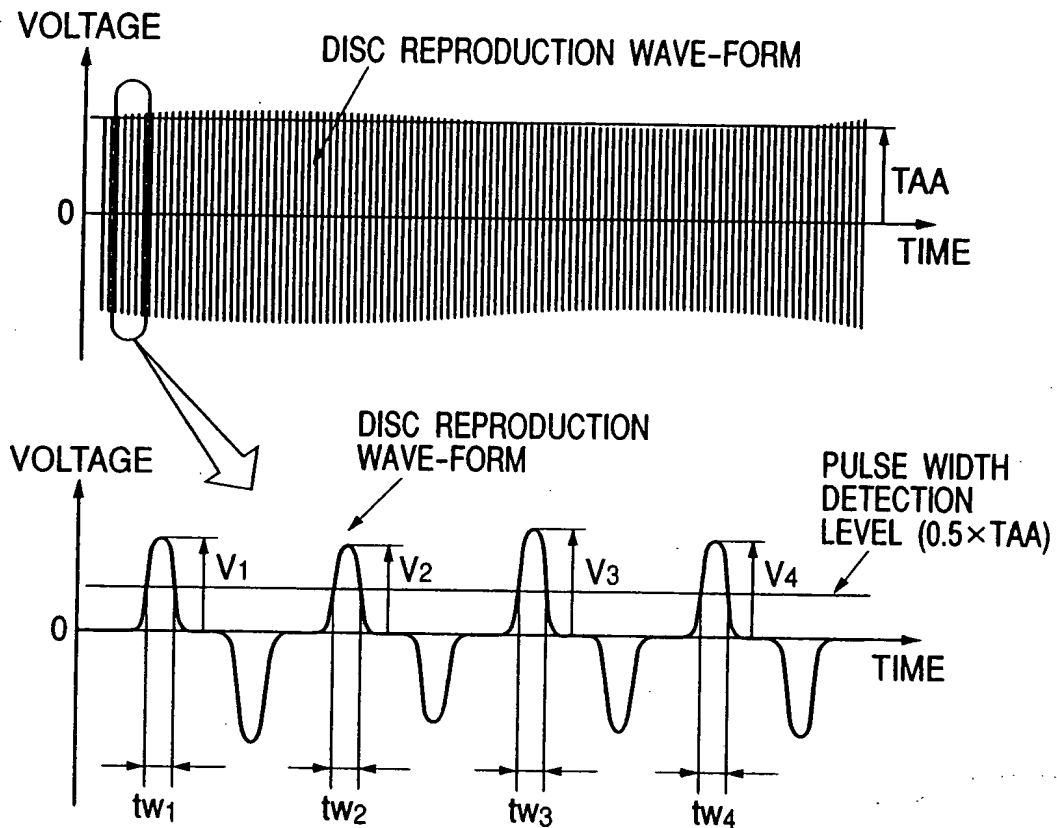


FIG. 11**PRIOR ART**

$$TAA = \frac{1}{n} \sum_{i=1}^n V_i$$

HOWEVER, TAA : MEASUREMENT VALUE OF TAA,

n : PULSE NUMBER OF DISC REPRODUCTION SIGNAL PER 1 TURN OF DISC, AND

V_i : PEAK VOLTAGE VALUE OF DISC REPRODUCTION SIGNAL PULSE.

$$PW = \frac{1}{n} \sum_{i=1}^n tw_i$$

HOWEVER, PW : MEASUREMENT VALUE OF PW,

n : PULSE NUMBER OF DISC REPRODUCTION SIGNAL PER 1 TURN OF DISC, AND

tw_i : PULSE WIDTH OF DISC REPRODUCTION SIGNAL PULSE EXCEEDING REFERENCE VOLTAGE.